

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for the examiner's amendment was given in a telephone interview with Mr. Eustace P. Isidore, Reg. No. 56,104 on November 4, 2008.
3. Amend the claims as follow:
 1. (currently amended) A method in a data processing system for sequencing of business objects in preparation for parallel processing in application integration, said method comprising the steps of:
 - receiving a plurality of business objects, wherein each business object is associated with an application;
 - allocating each business object to a data set of a plurality of data sets associated with the business object such that the data set contains all business objects associated with the application; [[and]]
 - partitioning the data sets into a plurality of groups such that each group contains one or more data sets, wherein there are less groups than there are data sets;
 - wherein partitioning the data sets includes performing a modulo reduction transformation represented as:
$$i = \text{abs}(k_j) \text{ modulo } n,$$
where, i is the integer event queue number, and $i = 0, 1, 2, \dots (n-1)$;

k_j is the application number that identifies the data set, and $j=0, 1, 2, \dots$
($m-1$);

m is an integer number identifying the number of unique data sets; and
 n is an integer number identifying the number of event queues;

storing each group of the plurality of groups in a separate one of a plurality of event queues; and
processing business objects contained within the same event queue of the plurality of event queues in series and business objects contained in different event queues of the plurality of event queues in parallel.

2. (original) The method according to claim 1, wherein the plurality of business objects are received at an interface to a business integration application.

3. (original) The method according to claim 1, wherein the step of allocating includes the step of performing a hash algorithm on an application number associated with a business object.

4-6. (canceled)

7. (currently amended) The method according to claim [[6]]1, wherein the number of groups is equal to a number of event queues of the plurality of event queues.

8. (canceled)

9. (currently amended) A data processing computer system having a processor and program logic for sequencing of business objects in preparation for parallel processing in application integration, the data processing system comprising:
an event partitioner having program logic that executes on the processor to perform the functions of:

receiving a plurality of business objects, wherein each business object of the plurality of business objects is associated with an application[, and];

allocating each business object of the plurality of business objects to a data set of a plurality of data sets associated with the business object such that the data set contains all business objects of the plurality of business objects associated with the application, said data set stored in a machine readable storage medium, [[and]]

partitioning the plurality of data sets into a plurality of groups such that each group of the plurality of groups contains one or more data sets of the plurality of data sets, wherein a number of groups of the plurality of groups is less than a number of data sets of the plurality of data sets;

wherein partitioning the data sets includes performing a modulo reduction transformation represented as:

$$i = \text{abs}(k_j) \text{ modulo } n,$$

where, i is the integer event queue number, and $i = 0, 1, 2, \dots (n-1)$;

k_j is the application number that identifies the data set, and $j=0, 1, 2, \dots$

$(m-1)$;

m is an integer number identifying the number of unique data sets; and

n is an integer number identifying the number of event queues;

directing event queues of a plurality of event queues to store each group of the plurality of groups in a separate one of the plurality of event queues; and

receiving the plurality of business objects from the plurality of event queues and processes business objects contained within the same event queue of the plurality of event queues in series and business objects contained in different event queues of the plurality of event queues in parallel.

10. (previously presented) The data processing computer system according to claim 9, wherein the event partitioner is an interface to a business integration application.

11-14. (canceled)

15. (currently amended) The data processing computer system according to claim [[14]] 9, wherein a number of event queues of the plurality of event queues is equal to the number of groups.

16. (canceled)

17. (currently amended) An article of manufacture comprising machine-readable medium including program logic embedded therein that causes control circuitry in a data processing system for sequencing of business objects in preparation for parallel processing in application integration to perform the steps of:

receiving a plurality of business objects, wherein each business object of the plurality of business objects is associated with an application;

allocating each business object of the plurality of business objects to a data set of a plurality of data sets associated with the business object such that the data set contains all business objects of the plurality of business objects associated with the application; [[and]]

partitioning the plurality of data sets into a plurality of groups such that each group of the plurality of groups contains one or more data sets of the plurality of data sets, wherein a number of groups of the plurality of groups is less than a number of data sets of the plurality of data sets;

wherein partitioning the data sets includes performing a modulo reduction transformation represented as:

$$i = \text{abs}(k_j) \text{ modulo } n,$$

where, i is the integer event queue number, and $i = 0, 1, 2, \dots (n-1)$;

k_j is the application number that identifies the data set, and $j = 0, 1, 2, \dots (m-1)$;

m is an integer number identifying the number of unique data sets; and

n is an integer number identifying the number of event queues;

storing each group of the plurality of groups in a separate one of a plurality of event queues; and

processing business objects contained within the same event queue of the plurality of event queues in series and business objects contained in different event queues of the plurality of event queues in parallel.

18. (original) The article of manufacture of claim 17, wherein the plurality of business objects are received at an interface to a business integration application.

19. (original) The article of manufacture of claim 17, wherein the step of allocating includes the step of performing a hash algorithm on an application number associated with a business object.

20-22. (canceled)

23. (currently amended) The article of manufacture of claim [[22]] 17, wherein the number of groups is equal to a number of event queues of the plurality of event queues.

24. (canceled)

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qing-Yuan Wu whose telephone number is (571)272-3776. The examiner can normally be reached on 8:30am-6:00pm Monday-Thursday and alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Qing-Yuan Wu/
Examiner, Art Unit 2194

/Thomas Lee/
Supervisory Patent Examiner, Art Unit 2115